SPECIFICATION

Please amend the specification as follows.

Please replace the paragraph beginning at page 15, line 14 with the following new entry:

Figure 5 illustrates a graphical user interface, according to an embodiment of the present invention, facilitating the configuration of bandwidth utilization controls. When an administrator, at client node 42 for example, logs into bandwidth management device 30 and authenticates himself, administrator interface 150 transmits a page-based graphical user interface (illustrated in Figure 5) to client node 42. Upon selection of the configuration interface, administrator interface module 150 transmits page-based graphical user interface [[60]] comprising various interface controls such as "apply" button 66, "add classes" button 68, pull-down menu 62, analysis interval field 63, and pull-down menu 64. Still further, for both outbound and inbound flows, graphical user interface [[60]] displays the most significant traffic classes relative to the current utilization statistic as computed over a selected analysis interval. As Figure 5 shows, graphical user interface [[60]], in one embodiment, displays the top ten traffic classes relative to the selected utilization statistic (here, average rate) over the selected analysis interval (here, 1 hour). In addition, graphical user interface [[60]] also includes category menus 72 facilitating the association of traffic class to a bandwidth control category.

Please replace the paragraph beginning at page 15, line 29 with the following new entry:

Figures 4 and 4A provide methods facilitating configuration of bandwidth controls using graphical user interface [[60]]of figure 5. When an administrator requests a configuration interface, administrator interface module 150, using a default utilization or other measured network statistic and analysis interval (see Figure 4, step 302), displays the most significant traffic classes based on the utilization statistic (step 304). In one

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embodiment, administrator interface module 150 selects a first traffic class in measurement engine database 140 (see Figure 4A, step 402) and computes a utilization statistic value for that traffic class (step 404). In one embodiment, administrator interface module 150 retrieves bandwidth utilization data associated with the traffic class and computes the utilization statistic over an analysis interval. Administrator interface module 150 repeats this process for all traffic classes in measurement engine database 140 (see steps 406 & 408). Administrator interface module 150 then orders the traffic classes according to the corresponding utilization statistic values (step 410) and displays the most significant traffic classes (step 412). In one embodiment, the most significant traffic classes comprise the first X (*e.g.*, 8, 10, *etc.*) traffic classes in the ordered set. In another embodiment, the most significant traffic classes are those traffic classes having utilization statistic values exceeding a threshold value (e.g., consuming more than a threshold percentage of aggregate bandwidth over an analysis interval). As Figure 5 illustrates, the graphical user interface [[60]] displays the most significant traffic classes in descending order relative to the bandwidth utilization statistic. Depending on the bandwidth utilization statistic, however, the list may be arranged in ascending order.

Please replace the paragraph beginning at page 16, line 21 with the following new entry:

As discussed below, the graphical user interface [[60]]of figure 5 allows an administrator to add to the list of displayed traffic classes, change the utilization or network statistic about which the ordered list is computed, and/or apply bandwidth utilization controls to displayed traffic classes. For example, pull-down menu 62 allows a network administrator to selectively view the most significant traffic classes relative to bandwidth utilization statistics, including average rate, peak rate, total bytes, and other measurable network statistics, such as response time and network efficiency. When a network administrator selects a utilization statistic from pull-down menu 62 (see Figure 306), client node composes a request for a new page, causing administrator interface

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150 to display the most significant traffic classes based on the selected utilization statistic (see steps 308 and 304). Similarly, field 63 and pull-down menu 64 allow a network administrator to specify an analysis interval over which utilization statistics are computed (see steps 310 and 312). In addition, "add classes" button 68 allows a network administrator to manually add traffic classes to the traffic classes displayed by interface 60. In one embodiment, when a network administrator clicks "add classes" button 68 (step 314), administrator interface module 150 transmits a page including a list of selectable traffic classes (step 316). When the network administrator confirms a selection, administrator interface module 150 determines whether any traffic classes were selected (step 318) and, if so, displays the most significant traffic classes and the additional traffic classes specified by the administrator (steps 324 and 304). Lastly, a network administrator may use pull-down menus 72 and "apply" button 66 to associate a bandwidth control category to a displayed traffic class. In one embodiment, the graphical user interface [[60]]of figure 5 allows a network administrator to select a predefined bandwidth control category or to configure a new bandwidth utilization control for the traffic class, such as a partition and/or a policy. In one embodiment, when network administrator clicks on "apply" button 66 (step 320), client node 42 transmits a request for an updated page, causing administrator interface module 150 to determine whether any changes to any bandwidth control categories have been made (step 322). If so, network administrator 150 applies the changes specified by the network administrator (step 328) and displays the revised configuration in an updated page-based interface. If no changes were made, then the selected interface is displayed (step 326) by the network administrator 150.

Please replace the paragraph beginning at page 16, line 21 with the following new entry:

Accordingly, the graphical user interface [[60]]of figure 5 automatically displays to the user those traffic classes whose configuration will most greatly influence

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operation of the network resource and allows a network administrator to concentrate on such traffic classes. A network administrator can access the graphical user Interface [[60]]of figure 5 and make desired changes to bandwidth utilization controls. Subsequently, the network administrator can return to the graphical user interface [[60]]of figure 5 to observe the results of the configuration and make further desired changes. Effective bandwidth distribution configurations can be created for even very complex networks in minutes with just a few easy decisions. The administrator only pays attention to traffic using significant amounts of bandwidth and to critical traffic that is not shown. Depending on the configuration of bandwidth control categories, a decision to raise the importance of one traffic class reduces bandwidth allocated to less important traffic types, while a decision to inhibit a type of traffic increases the bandwidth available to more important traffic types.

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